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09/648,111	08/25/2000	Kwang-Jo Hwang	3430-0131P	5562
7590 Birch Stewart Kolasch & Birch LLP PO BOX 747 Falls Church, VA 22040-0747			EXAMINER WILSON, ALLAN R	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* KWANG-JO HWANG

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Appeal 2008-0126  
Application 09/648,111  
Technology Center 2800

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Decided: November 13, 2008

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Before KENNETH W. HAIRSTON, MAHSHID D. SAADAT, and  
ROBERT E. NAPPI, *Administrative Patent Judges*.

NAPPI, *Administrative Patent Judge*.

ON REQUEST FOR REHEARING

Appellant has filed a paper under 37 CFR § 41.52 requesting that we reconsider our decision of May 30, 2008 wherein, we affirmed the rejections of claims 1 through 11 and 13 through 31 under 35 U.S.C. § 103 (a).

Appellant contends that:

- (i) the Board's decision contains a new ground of rejection;
- (ii) the Board's decision erred in treating 3, 4, 14, and 23 as standing or falling together with the rejection of the other claims on appeal;
- (iii) the Board's decision erred in making Findings of Facts which were based upon Appellant's disclosure.

We address the Appellant's contentions sequentially.

Appellant's contention (i):

On pages 2 and 3 of the Request for Rehearing, Appellant asserts that the Decision dated May 30 2008, contains a new grounds of rejection. Appellant asserts that Fact 1 on our decision is not based upon a finding made by the Examiner during prosecution but first raised at the hearing. Appellant argues that this deprived the Appellant the right to contest the Board's interpretation of the disclosure and that this is a new ground of rejection.

Appellant's arguments have not persuaded us that the decision of May 30, 2008 contained a new ground of rejection and that the issues were first raised at the May 14, 2008 hearing. Our decision states, on page 6 in the "Findings of Fact" section:

1. Appellant's Specification states that the exposed metal layer is exposed to a plasma of reactive gas such as  $H_2$  or a non-reactive gas such as Ar or  $N_2$ . When the  $H_2$  is used the gas reacts with the metal layer to form  $H_2O$  and the binding force of the remaining metal is lower. When a non-reactive gas is used "the binding force of the surface of the metal layer 44 becomes depressed physically. In particular Ar or  $N_2$  ions physically strike the surface of the metal layer 44, thereby breaking the chemical bonds and lowering the overall binding force of the metal layer." Specification 6-7.

Further, as stated on page 8 of our decision, we relied upon this fact to support the claim analysis that the claim 1 limitation of "treating the exposed portion of said metal layer with a first plasma" includes applying an  $N_2$  plasma. Further, as stated on page 8 of our decision, "[t]he Examiner has found that Chen teaches the same process of applying plasma." While not

stated in our prior decision, this finding by the Examiner can be found on pages 16 and 18 of the Answer. Further, while the Examiner did not explicitly state that the N<sub>2</sub> plasma of Chen inherently performs the functions of the claimed plasma, such was implied by the Examiner's statement "[l]owering an internal binding force in the exposed portion of the metal layer to increase a subsequent etch rate of the metal is a necessary result of using the plasma treatment of Chen in the method of Hirano." Answer 5.

Neither of Appellant's Briefs identified a difference between Chen's plasma treatment with N<sub>2</sub> and the claimed plasma treatment to rebut the Examiner's finding that they were the same. Appellant's arguments in the Briefs and at the hearing focused on the results achieved by the claimed treatment without discussing how the claimed plasma treatment differs from Chen's, i.e. why the claimed invention achieves the result of lowering internal binding force and Chen's treatment does not. Evidence and arguments directed to how the plasma treatment differs would permit us to evaluate a rebuttal of the Examiner's finding that the processes are the same. To allow us to further understand the invention and determine the scope of the claim, we queried Appellant's representative as to the difference between the two plasma treatments at the May 14, 2008 hearing. At the hearing, Appellant's representative did not provide evidence or argument sufficient to rebut the Examiner's finding that the processes are the same.

For the aforementioned reasons, we conclude that the Examiner made it sufficiently clear that the Examiner considered the claimed plasma treatment and Chen's plasma treatment to be the same. As such, we are not persuaded that our decision contained a new ground of rejection and Appellant's first contention has not convinced us to change our decision of

May 30, 2008.

Appellant's contention (ii):

On pages 4 and 5 of the Request for Rehearing, Appellant asserts that it was stated in the Brief and at hearing that claims 3, 4, 14, and 23 do not stand or fall together.

Appellant has misconstrued our decision. Initially we note that claims 3, 4, 14, and 23 are subject to a different rejection than claim 1, as such 37 CFR §1.41.37 (c)(1)(vii) does not permit Appellant to group or for the Board to treat the claims as grouped with claim 1. Appellant on page 18 of the Brief presented an argument directed to the rejection based upon Hirano, Chen, and Muraguchi (the rejection applied to claims 3, 4, 14, and 23). Appellant's argument states "these teaching of Muraguchi fail to address the deficiencies of Hirano and Chen in suggesting a claimed embodiment of the present invention." Brief 18. We addressed this argument on page 11 of the May 30 2008 decision, stating that Appellant's argument presents the same issue as discussed with respect to claim 1, i.e. the argument is directed to the alleged deficiencies in the teachings of Hirano and Chen.

Further, Appellant's argument on page 5 of the Request for Rehearing, that Fact 1 is directed to  $N_2$  whereas claims 3, 4, 14, and 23 do not relate to  $N_2$  but to  $H_2$ , and that none of the references discloses  $H_2$  is not persuasive of error in our decision as it was not raised in either of the Briefs. 37 CFR § 1.52(a)(1) states "Arguments not raised in the briefs before the Board and evidence not previously relied upon in the brief and any reply briefs are not permitted in the request for rehearing." As discussed above,

the Examiner identified in the Answer that he found Chen's plasma process to be the same as the process of claim 1. Further, on page 13 of the Answer, the Examiner found that the limitations of dependent claims 3, 4, 14, and 23 are made obvious in light of the additional teachings of Muraguchi. Appellant's Briefs presented no arguments directed to whether Muraguchi taught using H<sub>2</sub>. Further, by not presenting these arguments in the Briefs the Examiner has not been afforded opportunity to respond.

Thus, Appellant's second contention has not persuaded us that we erred in treating 3, 4, 14, and 23 as standing or falling together with the rejection of the other claims on appeal, and has not convinced us to change our decision of May 30, 2008.

Appellant's contention (iii):

On pages 5 and 6 of the Request for Rehearing, Appellant argues that the Board is in error for using Appellant's disclosure against Appellant in Findings of Fact 1.

As discussed above, with respect to Appellant's first contention, our May 30 2008, decision relied upon Fact 1 as part of our claim interpretation. Our reviewing court has stated that Office personnel must rely on Appellant's disclosure to properly determine the meaning of the terms used in the claims. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995). Claim 1 does not recite a N<sub>2</sub> plasma treatment, it is based upon analysis of Appellant's disclosure (the subject of Fact 1) that it's apparent that the claimed plasma treatment includes an N<sub>2</sub> plasma treatment such as Chen. Thus, Appellant's disclosure has been properly relied upon to

ascertain the scope of claim 1.

For the aforementioned reasons, Appellant's third contention has not persuaded us that we erred in making findings of fact which are based upon Appellant's disclosure and has not convinced us to change our decision of May 30, 2008.

Accordingly, while we have granted Appellant's Request for Rehearing to the extent that we have reconsidered our decision, that request is denied with respect to making any changes therein.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a) (1) (iv).

Appeal No. 2008-0126  
Application No. 09/648,111

REHEARING DENIED

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